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RAW SEQUENCE LISTING

DATE: 07/10/2002

PATENT APPLICATION: US/10/067,613

TIME: 11:16:23

Input Set : A:\ptoms.txt

Output Set: N:\CRF3\07102002\J067613.raw

3 <110> APPLICANT: Hunter-Cevera, Jennifer C.
 4 Leighton, Terrance
 5 Goldman, Stan
 6 Longchamp, Pascal
 7 McKinney, Nancy
 8 The Regents of the University of California
 10 <120> TITLE OF INVENTION: Species Specific Identification of Spore-Producing
 11 Microbes Using the Gene Sequence of Small Acid Soluble
 12 Spore Coat Proteins for Amplification Based Diagnostics
 14 <130> FILE REFERENCE: 0014939-001600US
 16 <140> CURRENT APPLICATION NUMBER: US 10/067,613
 C--> 17 <141> CURRENT FILING DATE: 2002-06-11
 19 <150> PRIOR APPLICATION NUMBER: US 60/138,167
 20 <151> PRIOR FILING DATE: 1999-06-08
 22 <150> PRIOR APPLICATION NUMBER: US 60/192,206
 23 <151> PRIOR FILING DATE: 2000-03-27
 25 <150> PRIOR APPLICATION NUMBER: US 09/590,759
 26 <151> PRIOR FILING DATE: 2000-06-08
 28 <160> NUMBER OF SEQ ID NOS: 38
 30 <170> SOFTWARE: PatentIn Ver. 2.1
 32 <210> SEQ ID NO: 1
 33 <211> LENGTH: 24
 34 <212> TYPE: DNA
 35 <213> ORGANISM: Artificial Sequence
 37 <220> FEATURE:
 38 <223> OTHER INFORMATION: Description of Artificial Sequence: Bacillus cereus
 39 primer Bcsasp-B 5' designed for heterologous PCR
 40 and sequenceing of Bacillus anthracis
 42 <400> SEQUENCE: 1
 43 atgagtaaaa aacaacaagg ttat 24
 46 <210> SEQ ID NO: 2
 47 <211> LENGTH: 24
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Artificial Sequence
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: Description of Artificial Sequence: Bacillus cereus
 53 primer Bcsasp-B 3' designed for heterologous PCR
 54 and sequenceing of Bacillus anthracis
 56 <400> SEQUENCE: 2
 57 ctgatttgag ctagaagatt gtga 24
 60 <210> SEQ ID NO: 3
 61 <211> LENGTH: 24
 62 <212> TYPE: DNA

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63 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: Description of Artificial Sequence: Bacillus cereus
67     primer Bcsasp-1 5' designed for heterologous PCR
68     and sequenceing of Bacillus anthracis
70 <400> SEQUENCE: 3
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74 <210> SEQ ID NO: 4
75 <211> LENGTH: 22
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial Sequence
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Description of Artificial Sequence: Bacillus cereus
81     primer Bcsasp-1 3' designed for heterologous PCR
82     and sequenceing of Bacillus anthracis
84 <400> SEQUENCE: 4
85 gcggtagct ctaccaccaa gt                22
88 <210> SEQ ID NO: 5
89 <211> LENGTH: 23
90 <212> TYPE: DNA
91 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Description of Artificial Sequence: Bacillus cereus
95     primer Bcsasp-2 5' designed for heterologous PCR
96     and sequenceing of Bacillus anthracis
98 <400> SEQUENCE: 5
99 atgtcagcta gcacaaataa att                23
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104 <212> TYPE: DNA
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107 <220> FEATURE:
108 <223> OTHER INFORMATION: Description of Artificial Sequence: Bacillus cereus
109     primer Bcsasp-2 3' designed for heterologous PCR
110     and sequenceing of Bacillus anthracis
112 <400> SEQUENCE: 6
113 ttatttttgg taaccgccta a                21
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117 <211> LENGTH: 161
118 <212> TYPE: DNA
119 <213> ORGANISM: Bacillus cereus
121 <220> FEATURE:
122 <223> OTHER INFORMATION: Bacillus cereus small acid-soluble spore protein 1
123     (sasp-1) sequence
125 <400> SEQUENCE: 7
126 cgtaatgaag tattagtctg aggcgctgaa caagctcttg atcaaatgaa atatgaaatt 60
127 gcacaagagt ttggtgtaca acttggtgca gatacaacag ctcgttcaaa cggatctgtt 120
128 ggtggtgaaa ttacaaaacg tttagtagca atggcagaac a                161
131 <210> SEQ ID NO: 8

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132 <211> LENGTH: 161
133 <212> TYPE: DNA
134 <213> ORGANISM: Bacillus anthracis
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Bacillus anthracis small acid-soluble spore
138     protein 1 (sasp-1) sequence
140 <400> SEQUENCE: 8
141 cgtaatgaat tattagttcg aggtgctgaa caagctcttg atcaaatgaa atatgaaatt 60
142 gcacaagagt ttggtgtaca acttggtgca gatacaacag ctcgttcaaa tggatctgtt 120
143 ggtggtgaaa ttacaaaacg tttagtagca atggctgaac a 161
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147 <211> LENGTH: 154
148 <212> TYPE: DNA
149 <213> ORGANISM: Bacillus anthracis and Bacillus cereus
151 <220> FEATURE:
152 <223> OTHER INFORMATION: Bacillus anthracis and Bacillus cereus small
153     acid-soluble spore protein 2 (sasp-2) sequence
155 <400> SEQUENCE: 9
156 agcggttcct ggtgctgaat cagcattaga ccaaatgaaa tacgaaatcg ctcaagagtt 60
157 tgggtgttcaa cttggagctg atgcaacagc tcgcgctaac ggttctgttg gtggcgaaat 120
158 cactaaacgt ctagtttcac tagctgagca acaa 154
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162 <211> LENGTH: 231
163 <212> TYPE: DNA
164 <213> ORGANISM: Bacillus cereus, Bacillus thuringiensis and Bacillus sp.
166 <220> FEATURE:
167 <223> OTHER INFORMATION: Bacillus cereus Bcer3 and BcerPub, Bacillus thuringiensis
BtT,
168     BtU, BtS, BtR, BtO, BtJ, 4J2, BtG and BtI and unidentified
169     Bacillus 1B/A small acid-soluble spore protein B (sasp-B)
170     sequence
172 <400> SEQUENCE: 10
173 aacaaagcaa cttctggtgc tagcattcaa agtacaaatg ctagttatgg tacagagttt 60
174 tcaactgaaa cagatgtaca agctgtaaaa caagcaaacg cacaatcaga agcaaagaaa 120
175 gcacaagctt ctggtgcaca aagtgc aaac gctagttatg gtacagaatt tgcaactgaa 180
176 acagacgtgc attctgtgaa aaaacaaaat gctaagtcag ctgcaaaaca a 231
179 <210> SEQ ID NO: 11
180 <211> LENGTH: 237
181 <212> TYPE: DNA
182 <213> ORGANISM: Bacillus anthracis
184 <220> FEATURE:
185 <223> OTHER INFORMATION: Bacillus anthracis small acid-soluble spore
186     protein B (sasp-B) sequence, amplicon from 38
187     Bacillus anthracis strains
189 <400> SEQUENCE: 11
190 aacaaggcaa cttctggtgc tagcattcaa agcacaaatg ctagttatgg tacagagttt 60
191 gcgactgaaa caaatgtaca agcagtaaaa caagcaaacg cacaatcaga agctaagaaa 120
192 gcgcaagctt ctggtgctag cattcaaagc acaaatgcta gttatggtac agaatttgca 180
193 actgaaacag acgtgcatgc tgtgaaaaaa caaatgcac aatcagctgc aaaacaa 237
196 <210> SEQ ID NO: 12

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197 <211> LENGTH: 231
 198 <212> TYPE: DNA
 199 <213> ORGANISM: Bacillus anthracis and Bacillus sp.
 201 <220> FEATURE:
 202 <223> OTHER INFORMATION: Bacillus anthracis NMRI#15 and unidentified Bacillus 1B,
 003,
 203 III and IV small acid-soluble spore protein B (sasp-B) sequence
 205 <400> SEQUENCE: 12
 206 aacaaggcaa cttctggcgc tagcattcaa agtacaaatg ctagttatgg tacagagttt 60
 207 tcaactgaaa cagatgtgca agcagtaaaa caagcaaacg cacaatcaga agcaaagaaa 120
 208 gcacaagctt ctggtgcaca aagtgcacaa gctagttatg gtactgaatt tgcaactgaa 180
 209 acagatgtgc atgctgtgaa aaaacaaaat gcacaatcag ctgcaaaaaca a 231
 212 <210> SEQ ID NO: 13
 213 <211> LENGTH: 231
 214 <212> TYPE: DNA
 215 <213> ORGANISM: Bacillus thuringiensis
 217 <220> FEATURE:
 218 <223> OTHER INFORMATION: Bacillus thuringiensis BtB small acid-soluble spore protein
 B
 219 (sasp-B) sequence
 221 <400> SEQUENCE: 13
 222 aacaaggcaa cttctggtgc tagcattcaa agtacaaatg ctagttatgg tacagagttt 60
 223 tcaactgaaa cagatgtaca agcagtaaaa caagcaaacg cacaatcaga agcaaagaaa 120
 224 gcacaagctt ctggtgcaca aagtgcacaa gctagttatg gtactgaatt tgcaactgaa 180
 225 acagacgtgc atgctgtgaa aaaacaaaat gcacaatcag ctgcaaaaaca a 231
 228 <210> SEQ ID NO: 14
 229 <211> LENGTH: 231
 230 <212> TYPE: DNA
 231 <213> ORGANISM: Bacillus thuringiensis
 233 <220> FEATURE:
 234 <223> OTHER INFORMATION: Bacillus thuringiensis BtY small acid-soluble spore protein
 B
 235 (sasp-B) sequence
 237 <400> SEQUENCE: 14
 238 aacaaggcaa cttctggtgc tagcattcaa agtacaaatg ctagttatgg tacagagttt 60
 239 tcaactgaaa cagatgtaca agcagtaaaa caagcaaacg cacaatcaga agcaaagaaa 120
 240 gcacaagctt ctggtgcaca aagtgcacaa gctagttatg gtacagaatt tgcaactgaa 180
 241 acagacgtgc atgctgtgaa aaaacaaaat gcacaatcag ctgcaaaaaca a 231
 244 <210> SEQ ID NO: 15
 245 <211> LENGTH: 231
 246 <212> TYPE: DNA
 247 <213> ORGANISM: Bacillus thuringiensis
 249 <220> FEATURE:
 250 <223> OTHER INFORMATION: Bacillus thuringiensis 4A1, BtV and BtZ small acid-soluble
 251 spore protein B (sasp-B) sequence
 253 <400> SEQUENCE: 15
 254 aacaaggcaa cttctggtgc tagcattcaa agtacaaatg ctagttatgg tacagagttt 60
 255 gcaactgaaa caaatgtaca agcagtaaaa caagcaaacg cacaatcaga agcaaagaaa 120
 256 gcacaagctt ctggtgcaca aagtgcacaa gctagttatg gtacagaatt tgcaactgaa 180
 257 acagacgtgc atgctgtgaa aaaacaaaat gctaagtcag ctgcaaaaaca a 231
 260 <210> SEQ ID NO: 16
 261 <211> LENGTH: 231

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262 <212> TYPE: DNA
 263 <213> ORGANISM: Bacillus thuringiensis
 265 <220> FEATURE:
 266 <223> OTHER INFORMATION: Bacillus thuringiensis BtL small acid-soluble spore protein

B

267 (sasp-B) sequence
 269 <400> SEQUENCE: 16
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 271 tcaactgaaa cagatgtaca agctgtaaaa caagcaaacg cacaatcaga agcaaagaaa 120
 272 gcacaagctt ctggtgcaca aagtgcacaaac gctagttatg gtacagaatt tgcaactgaa 180
 273 acagacgtgc atgctgtgaa aaaacaaaat gctaagtcag ctgcaaaaaca a 231
 276 <210> SEQ ID NO: 17
 277 <211> LENGTH: 231
 278 <212> TYPE: DNA
 279 <213> ORGANISM: Bacillus cereus
 281 <220> FEATURE:
 282 <223> OTHER INFORMATION: Bacillus cereus Bcer2 small acid-soluble spore protein B
 283 (sasp-B) sequence
 285 <400> SEQUENCE: 17
 286 aacaaggcaa cttctggtgc tagcattcaa agtacaaatg ctagttatgg tacagagttt 60
 287 tcaactgaaa cagatgtaca agctgtaaaa caagcaaacg cacaatcaga agcaaagaaa 120
 288 gcacaagctt ctggtgcaca aagtgcacaaac gctagttatg gtacagaatt tgcaactgaa 180
 289 acagacgtgc atgctgtgaa aaaacaaaat gctaagtcag ctgcaaaaaca a 231
 292 <210> SEQ ID NO: 18
 293 <211> LENGTH: 231
 294 <212> TYPE: DNA
 295 <213> ORGANISM: Bacillus thuringiensis
 297 <220> FEATURE:
 298 <223> OTHER INFORMATION: Bacillus thuringiensis BtC, BtE2, BtE4, BtK, BtM and BtN

small

299 acid-soluble spore protein B (sasp-B) sequence
 301 <400> SEQUENCE: 18
 302 aacaaggcaa cttctggtgc tagcattcaa agtacaaatg ctagttatgg tacagagttt 60
 303 gcgactgaaa caaatgtaca agcagtaaaa caagcaaacg cacaatcaga agcaaagaaa 120
 304 gcacaagctt ctggtgcaca aagtgcacaaac gctagttatg gtacagaatt tgcaactgaa 180
 305 acagacgtgc atgctgtgaa aaaacaaaat gctaagtcag ctgcaaaaaca a 231
 308 <210> SEQ ID NO: 19
 309 <211> LENGTH: 231
 310 <212> TYPE: DNA
 311 <213> ORGANISM: Bacillus thuringiensis and Bacillus cereus
 313 <220> FEATURE:
 314 <223> OTHER INFORMATION: Bacillus thuringiensis BtP and BtZ and Bacillus cereus Bcer1
 315 small acid-soluble spore protein B (sasp-B) sequence
 317 <400> SEQUENCE: 19
 318 aacaaggcaa cttctggtgc tagcattcaa agtacaaatg ctagttatgg tacagaattt 60
 319 gctactgaaa caaatgtaca agcagtaaaa caagcaaacg cacaatcaga agcaaagaaa 120
 320 gcacaagctt ctggtgcaca aagtgcacaaac gctagttatg gtacagaatt tgcaactgaa 180
 321 acagacgtgc atgctgtgaa aaaacaaaat gctaagtcag ctgcaaaaaca a 231
 324 <210> SEQ ID NO: 20
 325 <211> LENGTH: 231
 326 <212> TYPE: DNA

VERIFICATION SUMMARY

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Output Set: N:\CRF3\07102002\J067613.raw

L:17 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:526 M:283 W: Missing Blank Line separator, <220> field identifier